| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
| --- | --- | --- | --- | --- | --- | --- |
| L2 | 2 | "6078867".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 12:58 |
| L3 | 2 | "6069118".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 12:58 |
| L7 | 0 | 703/2.ccls. and (fault$3 and fractur$3 same borehole same subsurface) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:23 |
| L9 | 0 | 703/2.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force near 3equal$6 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:26 |
| L10 | 2 | 703/2.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:28 |
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| L12 | 1 | 702/6.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:30 |
| L13 | 1 | 703/6.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:29 |
| L14 | 0 | 703/9.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:29 |
| L15 | 5 | 703/10.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:29 |

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|---|---|---|---|---|---|---|
| L16 | 0 | 507/277.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:30 |
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| L18 | 0 | 702/5.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:30 |
| L19 | 0 | 702/27.ccls. and (fault$3 or fractur$3 same borehole same subsurface) and node same force | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:31 |
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| S14 | 2 | accumulator same tree and intermed$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/16 18:05 |
| S15 | 1 | accumulator same hierarch$6 and intermed$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/16 18:05 |
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| S17 | 0 | accumulator same layer$2 same intermed$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/16 18:07 |

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| S19 | 0 | accumulator same intermed$3 near3 result | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/16 18:08 |
| S20 | 0 | accumulator and tree same intermed$3 near3 result | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/16 18:09 |
| S21 | 0 | accumulator and tree and intermed$3 near3 result | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/16 18:09 |
| S22 | 3 | accumulator same layer$2 near3 tree | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/16 18:10 |
| S23 | 18 | accumulator near3 method same intermediate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/16 18:11 |
| S25 | 1 | 2002/0039386 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/17 12:05 |
| S26 | 0 | 2002/0039386.pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/17 12:41 |
| S27 | 3 | "6571268".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/17 12:42 |
| S28 | 100 | Han.in. and accumulator | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/17 12:43 |

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| S30 | 0 | configur$4 same subgraph same isomorph$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/17 13:07 |
| S31 | 6 | map$3 same subgraph same isomorph$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/17 13:28 |
| S32 | 3 | S31 and resource | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 13:12 |
| S33 | 3 | hardware same resource same subgraph | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/17 13:14 |
| S34 | 6 | hardware same resource same subgraph | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 13:15 |
| S35 | 6 | hardware same resource same subgraph | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 13:26 |
| S36 | 25 | SoC same resource same configur$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 13:28 |
| S37 | 0 | S36 and subgraph | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 13:27 |
| S38 | 0 | S36 and isomorph$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 13:27 |

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|---|---|---|---|---|---|---|
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| S41 | 2 | "5907696".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 13:56 |
| S42 | 543 | event near3 (label or time) and network near3 simulat$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 13:58 |
| S43 | 4 | event near3 label and network near3 simulat$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 14:43 |
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| S46 | 0 | behavior$3 near3 model same debug$4 and (vhdl or verilog) and firmware same test$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/17 14:49 |
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| S50 | 9 | dynamic adj range adj relaxation | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/19 13:20 |

Day : Thursday
Date: 1/19/2006

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Time: 18:00:51

## Inventor Name Search Result

Your Search was:

Last Name = HARDY
First Name = HUMPHREY

| Application# | Patent# | Status | Date Filed | Title | Inventor Name |
|---|---|---|---|---|---|
| 09542307 | 6370491 | 150 | 04/04/2000 | Method of modeling of faulting and fracturing in the earth | HARDY, HUMPHREY H. |
| 09664176 | 6571177 | 150 | 09/18/2000 | COLOR DISPLAYS OF MULTIPLE SLICES OF 3-D SEISMIC DATA | HARDY, HUMPHREY H. |
| 09923048 | Not Issued | 95 | 08/06/2001 | METHOD OF MODELING OF FAULTING AND FRACTURING IN THE EARTH | HARDY, HUMPHREY H. |
| 09923060 | Not Issued | 99 | 08/06/2001 | METHOD OF MODELING OF FAULTING AND FRACTURING IN THE EARTH | HARDY, HUMPHREY H. |
| 09949966 | Not Issued | 95 | 09/10/2001 | METHOD OF MODELING OF FAULTING AND FRACTURING IN THE EARTH | HARDY, HUMPHREY H. |
| 10036813 | Not Issued | 71 | 12/21/2001 | Method of load and failure prediction of downhole liners and wellbores | HARDY, HUMPHREY H. |

Inventor Search Completed: No Records to Display.

**Search Another: Inventor** **Last Name** HARDY **First Name** HUMPHREY Search

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## Search Results

Relevance | Results 1-5 of about 5

95% **The History of Horizontal Wells in the V Fields**

**SPE eLibrary** Draining low relief, fhmk arms of the field, Accessing multiple, potentially isolated fault compartments, The degreeof successhas been mixed, Some wells surpassedtheir objectives while others have been disappointing. ORIGINAL DEVELOPMENT CONCEPT The original V F\clds developmentplan envisaged producingthe gasby locatingwells in structuralhighs whereeitherZme C couldbeaccessed,or wherethere was suff~cientstructuralheight to fracture Zone B without risk of water production.

92% **Safah Field: A Case History of Field Development**

**SPE eLibrary** The mechaniem separating the reservoirs is not clear, but is suspected to be small amplitude normal faults (Figure 4).

86% **Oil and Gas Investor Every Month Temblor formation shakes gas loose**

**E&Pnet** Westminster Resources Ltd., one of the partners in the well, said the target was a seismically defined, fault-bounded anticline with potential reserves from 1 Tcf to 2 Tcf of gas. After an assessment, the partners speculated the tight fold that was the drilling target formed the anticline and created a fracture system in the brittle sandstone. Those fractures caused the lost circulation and the high gas flow, but they also allowed water to travel up to the producing zone.

73% **Reservoir Modeling of Marginal Aeolian/Sabkha Sequences, Southern North Sea (U.K. Sector)**

**SPE eLibrary** Page 1 o SPE 18155 Reservoir Modeling of Marginal Aeolian/Sabkha Sequences, Southern North Sea (U.K. Sector) by J.H. Martin,* Intl. Petroleum Engineering Consultants Ltd., and P.F. Evans, Keele U. q SPE Member 2op@@rt 1SSS, Sooiety of Petroleum Engineer. M poper was prepued for presentation at tho SSrd Annual Technical Conference and Exhibition of the Society of Petroleum Engineers held In

+oLwtorr,lx, Ootober 2-5, 1ss2. MS paper waa seleoted for preeentatbn by an SPE Program Cammitlaa fotbwing rmview of Information contxlned In qn abotraof oubrnkted by the Mfwr(o), Contentc of ttw paper, M presented, have nor been revkwed by the Society of

71%

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Enterprise Oil has signed an 8-year exploration agreement for Morocco□s Cap Draa Haute Mer deepwater block south of Agadir with state oil company Office National de Recherches & d□Exploitations Petrolieres The company will spud the No. 2 well to test the Hemlock formation in an adjacent fault block and plans up to three additional wells. 15.

Relevance

Results 1-5 of about 5

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## Search Results

Relevance | Results 1-25 of about 941 | Next

97% **Post-Yield Material Characterization for Thermal Well Design**

**SPE eLibrary** This paper proposes a new basis for characterizing mechanical steel properties that provides the static strength and stiffness over the post-yield strain range. Relaxation characteristics are interpreted from testing, and local stiffness properties are provided. Finally, the rate to complete the test to failure and determine the ultimate, or tensile, strength is specified to be in the range of 8.3×10-4 s-1 to 8.3×10-3 s-1. The rates for yield and ultimate have only a small overlapping range of 8.3×10-4 s-1 to 10×10-4 s-1.

97% **Wettability Index Determination by Nuclear Magnetic Resonance**

**SPE eLibrary** A reduction of the oil relaxation time away from its bulk value is generally known as a qualitative wettability indicator. Wettability ranges from pure waterwet, via intermediate, or neutral, to oilwet. Its wettability index ranges from +1 for fully water-wet to -1 for fully oil-wet. Subsequently, it has become clear that in non-waterwet rock the oil experiences an accelerated relaxation.

97% **When Should We Worry About Supercharging in Formation Pressure While Drilling Measurements?**

**SPE eLibrary** Also, because the formation pressure while drilling tools may test the formation shortly after it has first been drilled, there can be comparatively little time for elevated pressures to relax. While this may be practical for the rheology and static filtration properties, the measurement of dynamic filtration characteristics requires more complicated apparatus. For that reason, for the dynamic parameters it may be necessary to rely on a library of typical values or to recognize that a significant uncertainty enters here and to simulate a range of cases.

97% **Rheology of Gels Used for Conformance Control in Fractures**

**SPE eLibrary**

97% **Remaining-Oil Determination Using Nuclear Magnetism Logging**

**SPE eLibrary** Page 1 Page 2 Page 3 Page 4 Page 5 Page 6 Page 7 Page 8 Page 9 Page 10

97% **Molecular Degradation, Injectivity, and Elastic Properties of Polymer Solutions**

**SPE eLibrary** Page 1 Page 2 Page 3 Page 4 Page 5 Page 6 Page 7 Page 8 Page 9

97% **The Effects of Pressure and Rotary Speed on the Drag Bit Drilling Strength of Deep Formations**

**SPE eLibrary** The five rock types were chosen to cover a broad range of' perme- ability, strength and porosity values. These data are used to evaluate the effects of rotary speed and bit weight on TSD cutter wear in deep formations using the analysis pro- vided by ~JhJkZi.'2 Dynamic Confinement Model Dynamic confinement pressures arise when the magnitude of di latant inelastic volumetric strain is greater than the compres- sive elastic strain. Fi- nally. the ratio of dynamically confined to unconfined rock strength is calculated. Table i lists the observed rock properties required to ob- tain the dynamic confinement pressure.

97% **A New Family of Demulsifiers for Treating Oilfield Emulsions**

**SPE eLibrary** Page 1 Page 2 Page 3 Page 4 Page 5 Page 6 Page 7

97% **New Methodology To Investigate Formation Damage Using Non-Destructive Analytical Tools**

**SPE eLibrary** Page 1 Page 2 Page 3 Page 4 Page 5 Page 6 Page 7 Page 8 Page 9 Page 10 Page 11 Page 12 Page 13

97% **Pressure Gauge Specification Considerations in Practical Well Testing**

**SPE eLibrary** Page 1 Page 2 Page 3 Page 4 Page 5 Page 6 Page 7 Page 8 Page 9 Page 10 Page 11 Page 12 Page 13 Page 14

97% **Crosslinked Borate HPG Equilibria and Rheological Characterization**

**SPE eLibrary** A model to predict the relaxation time for a reversibly crosslinked polymersin concentratedsolutionor melt regime has- presemtedby LeWe#2. The propertiesof crosslinkedborate gels in dynamic oscillatory shear has Mm studied by Pezron et a123and Kesavan and Prud'homme2q,`ile gels were subjected to dynamic oscillatory shear to determine the modulus and relaxation time, Steady shear experiments were performed in capillary tubes at shear rates higher than the critical shearrate, which is the reciprocal of the relaxation time, so that...

97% **Enhanced In-Situ Stress Profiling With Microfracture, Core, and Sonic-Logging Data**

**SPE eLibrary** Core testing provides stress measurements through stresslstrain relaxation methods. 8.9 Under ideal eor-recovery and gauge-resolution conditions, the calculat- ed values can be within an acceptable range. 3 Also, core-meamred Poisson's ratios (PRs) (boti static and dynamic) can be used with elzstic-modeling efforts to e3timate stress.

97% **Characterization of Crosslinked Gel Kinetics and Gel Strength Using NMR**

**SPE eLibrary**

Clusters range from small, starlike molecules to large heavily cross-linked, and fairly concentrated microgel cores 1. In the present work we studied the crosslinking of an aqueous HPAm/Cr(III)-acetate gel through visual observation (bottle testing), rheological monitoring, and low field NMR relaxation. In this paper, we present first a brief literature review of the gelation kinetics, basics on the dynamic rheology

characterization, and low field NMR theory.

97% [A Real-Time Well Site Log Analysis Application Using MRI Logs]

**SPE eLibrary** A set of procedures has been developed to guide the process so that reasonable interpretations can be obtained over a broad range of operating conditions. It relies on contrasting rates of longitudinal relaxation times, or T1, among the fluids present in the reservoir. Based on estimates of fluid relaxation times and the fluid-parameter boundary conditions, a search is performed on EDIF to extract optimized T2 values for oil and gas.

97% [Advanced Sensor Infrastructure for Real Time Reservoir Monitoring]

**SPE eLibrary** Sensors cover a wide range of parameters, including distributed temperature, pressure, acoustic sensors and acoustic sensor arrays for in-reservoir imaging of formation, fluid front movements and seismic relaxation. Sensor Dynamics and Chevron have developed a different approach to permanent downhole monitoring which we believe will provide the infrastructure with which to create a paradigm shift in reservoir management.

97% [Magnetic Resonance Relaxation-Tomography to Assess Fractures Induced in Vugular Carbonate Cores]

**SPE eLibrary** By combining voxel-by-voxel signal intensity from the porosity map and relaxation time from the relaxation time map, one get the distribution of the signal intensity as a function of the relaxation time for selected internal regions of interest (ROI). One can compute the fraction of water in the ROI, relative to the total amount of water in the ROI, having relaxation time in a selected range. The histograms of relaxation times of selected ROI's were obtained. The RT technique has three different requirements: quantitative porosity images, relaxation time maps, and non-spatially-resolved relaxation measurements (as reference).

97% [Applications of Wireline Stress Measurements]

**SPE eLibrary** Examples of stress tests carried out in a wide range of forma- tions are presented, with applications to the design of hydraulic stimulations, the stability of deviated wells, screenless comple- tions for sand control, and enhanced recovery programs. These techniques include overcoring, analysis of focal mechanisms of induced seis- micity, size of breakouts, and core relaxation differential strain curve analysis and anelastic strain recovery Equipment The tool used to perform the stress tests reported in this paper is the wireline-conveyed MDT* modular formation dynamics tester.

96% [Numerical Simulations of NMR Responses for Improved Interpretations of NMR Measurements in Reservoir Rocks]

**SPE eLibrary** The estimation of dynamic flow properties, such as permeability, from non-dynamic NMR measurements has limitations, of course. However, the relaxation time, and hence the NMR estimated permeability, will be finite. The connection between NMR relaxation measurements and petrophysical parameters such as permeability stems from the strong effect that the rock surface has on promoting magnetic relaxation. 2) S/V is the surface-to-volume ratio of the pore, T2b is bulk relaxation time of the fluid that fills the pore space, and is the surface relaxation strength.

96% [Experimental Evaluation of Viscoelastic Theories]

**SPE eLibrary** linear dynamic data with viscosity and first normal stress data in vi,scometricflow. only and the directly pertinent theoretical results are presented for each theory. s Da p2 The relaxation spectra were approximated by an T12 expression given by St~erman and Schwarz114 --- K = q(I<) and reported by Ferry: w Jf H(A)e-s/A~ ,= mF/J:~s~) `knxds~ " [la] [ I\ d~GII H(I) = # G" - ----- - d(Inm)y. ~ - ~ q [14] o -w al T1I-T27_ This first approximation was successively ~Z---- = corrected until the relaxation spe~:trumwould m- xe$roduce the G" curve. Corrections to the JJ ~) c-s/), 7 relaxation spectrlmiwere taken as the different a(I+X;: d!n),ds.

96% **VHF ELECTRICAL MEASUREMENT OF SATURATIONS IN LABORATORY FLOODS**

**SPE eLibrary** Other previous electrical methods were based on the dielectric constant of porous media in the radio frequency (rf) range below 30 MHz. AL microwave frequencies, the dipolar relaxation dominates e". In the 200 MHz to 1.2 GHz range e' increases with increasing salinity. The dielectric loss e" decreases as f-l but begins to flatten out above 100 MHz as the dipolar relaxation losses increase. 10.

96% **Studies on the Damage Induced by Drilling Fluids in Limestone Cores**

**SPE eLibrary** Low frequency (2 MHz) nuclear magnetic resonance relaxation (NMRR) measurements were also used for following the effect of solid mud particulate invasion on the pore size distribution. The new methods, considered in this paper, are namely the nuclear magnetic resonance imaging (NMRI) and nuclear magnetic resonance relaxation (NMRR) techniques, combined with non conventional rheological approaches, particle size distribution (PSD) analysis, mud cake and spurt loss characterizations.

96% **Nuclear Magnetic Resonance (NMR), a valuable tool for Tar detection in a Carbonate Formation of Abu Dhabi.**

**SPE eLibrary** NMR transverse T2 relaxation contains useful petrophysical and geological information. There are three independent phenomena controlling fluid relaxation in the rock pore space: Surface relaxation mechanism Bulk fluid relaxation mechanism Molecular diffusion mechanism. The overall rate of decay can be expressed as d b s T T T T 2 1 2 1 2 1 2 1 + + = (Equation #1) where 2 1T is the total transverse relaxation time, s T 2 1 is the surface relaxation, b T 2 1 is the bulk fluid relaxation and d T 2 1 is the diffusion relaxation. Bulk relaxation refers to the relaxation time of a fluid in a large container within a constant magnetic field.

96% **Specific Surface and Fluid Transport in Sandstones Through NMR Studies**

**SPE eLibrary** Wltb this aim, properties such as permeahility, porosity, spe@c smfa.ce, FRF, and relaxation time were measured and their correlations studied. The strategy of the krviies to predict sandstone permeability through T1 relaxation lifetimes is to lobk for wrhwx for exponents B and C irr Tfr,@ thrr that bt predict.meamred k values. A god estimation of k, however, often can be found by relaxation lifednre3, apparently becau3e of the correlation exkdng between pore-node and pore-throat sizes in sandstones. Care wa.$ taken to cover a wide range of permeability values without includ- ing samples with signiihmt shalimss.

96% **NMRI Characterization of Fractures and Multiphase Transport in Fractured Porous Media**

**SPE eLibrary** This technique is based on the feature that the observed NMR relaxation rate in porous media is dominated by relaxation at surfacesslo. Suppose that fluid in one of the regions can be approximately characterized by relaxation time 771. The spins in the fractures may be suitably treated as relaxing at a single rate. H_ow- ever, the relaxation in the pore matrix usually is not well represented with a single exponential.

95% **Study of Calcium Carbonate Precipitation in the Near-Well Region Using 47Ca2+ as Tracer**

**SPE eLibrary** The technique is applicable for dynamic scaling investigations in any flowing system in porous media and constitutes a valuable tool for further studies of scaling mechanisms involved in processes occurring in a variety of systems (oilfield, geothermal, desalination etc). For example, a certain `relaxation time', tr, is required for the system to achieve a quasi-state distribution of molecular clusters.

Relevance Results 1-25 of about 941 Next